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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,598	11/04/2003	Joseph Edward Fattori	IR 6239-00	6507
23909	7590	11/30/2004	EXAMINER	
COLGATE-PALMOLIVE COMPANY 909 RIVER ROAD PISCATAWAY, NJ 08855			COLE, LAURA C	
		ART UNIT		PAPER NUMBER
		1744		

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/700,598	FATTORI, JOSEPH EDWARD	
	<b>Examiner</b>	<b>Art Unit</b>	
	Laura C Cole	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 26 October 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-6 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 04 November 2003 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10262004.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the washer (claim 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Wiedmann et al., USPN 5,448,792.

Wiedmann et al. discloses the claimed invention including a toothbrush comprising a handle (Column 3 Line 33), a head (5) with cleaning elements (7) thereon movable relative to the handle (49), a motor (10) with a drive shaft (unlabeled, see Figure 3 and 6), a first housing (34) fixedly connected to a shaft (39) having a cam device (41), a second housing (43) having a cam device (46) cooperatively engaged with the cam device on the first housing (see Figures 6 and 7) to convert rotational movement of the first housing into reciprocating motion of the second housing along the longitudinal axis (28) of the toothbrush (Column 5 Lines 9-11), and a volute extension of the second housing (3) cooperatively mating with an opening in a portion of the head (45) to translate reciprocating movement of the second housing into oscillating motion of the cleaning elements (Column 5 Lines 11-14). The cam devices on the housings are a cam follower (46) and a mating helical track (41) for the cam follower. The head of the toothbrush is removable (Column 3 Lines 34-36). The handle includes an upper conical

enclosure surrounding the first and second housings (see the void of space in Figure 6), the enclosure also having an upper sliding surface (see Figures).

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng, USPN 6,581,233.

Cheng discloses the claimed invention including a toothbrush comprising a handle (1), a head (18) with cleaning elements (see Figure 1) thereon movable relative to the handle (Abstract), a motor (9) with a drive shaft (28), a first housing (32) fixedly connected to a shaft (31) having a cam device (33), a second housing (38) having a cam device (34) cooperatively engaged with the cam device on the first housing (see Figure 6) to convert rotational movement of the first housing into reciprocating motion of the second housing along the longitudinal axis (7) of the toothbrush (see Figures; Column 2 Lines 3-14), and a volute extension of the second housing (12) cooperatively mating with an opening in a portion of the head (see Figure 4) to translate reciprocating movement of the second housing into oscillating motion of the cleaning elements (Column 2 Lines 3-14). The head of the toothbrush is removable (Column 3 Lines 46-51). The handle includes an upper conical enclosure surrounding the housings (see Figure 1), the enclosure having an upper sliding surface (shown in Figure 1, not labeled, near where the numeral "13" is pointing). The stem has a lower sliding surface (also shown in Figure 1, not labeled).

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Hwang, USPN 5,381,576.

Hwang discloses the claimed invention including a toothbrush comprising a handle (10; Column 2 Lines 40-41), a head (30) with cleaning elements (31) thereon movable relative to the handle (Abstract), a motor (20) with a drive shaft (unlabeled, see Figure 7), a first housing (22) fixedly connected to a shaft (21) which is a cam device (21), a second housing (42) having a cam device (50) cooperatively engaged with the cam device on the first housing (see Figures 3-4D) to convert rotational movement of the first housing into reciprocating motion of the second housing along the longitudinal axis of the toothbrush (see Figures; Abstract), and a volute extension of the second housing (40) cooperatively mating with an opening in a portion of the head (see Figure 7) to translate reciprocating movement of the second housing into oscillating motion of the cleaning elements (Abstract). The head of the toothbrush is removable (Column 3 Lines 9-11).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng, USPN 6,581,233 in view of Kent, USPN 3,196,298.

Cheng discloses all elements above, however does not include a washer located between the sliding surfaces of the handle and the head.

Kent discloses an electric toothbrush that converts rotational movement into reciprocating motion wherein there is a stem with a sliding surface (see Figures, Column 2 Lines 17-68). Kent also provides a washer (64) that provides a seal at an upper conical enclosure and sliding surfaces.

It would have been obvious for one of ordinary skill in the art to modify the sliding surfaces of Cheng by adding a washer, as Kent teaches, in order to further seal the conical enclosure from water, dirt, or dust.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,383,242 to Bigler et al. and USPN 6,453,498 to Wu, USPN 6,453,498 both disclose electric toothbrushes that convert rotary motion into reciprocal motion using cam devices that are a cam follower and a mating helical track.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*LCC*  
LCC  
23 November 2004

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